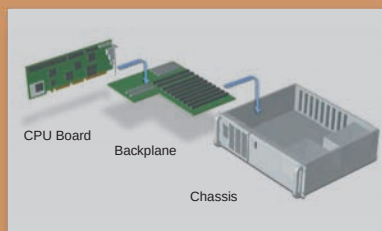


Board Computer

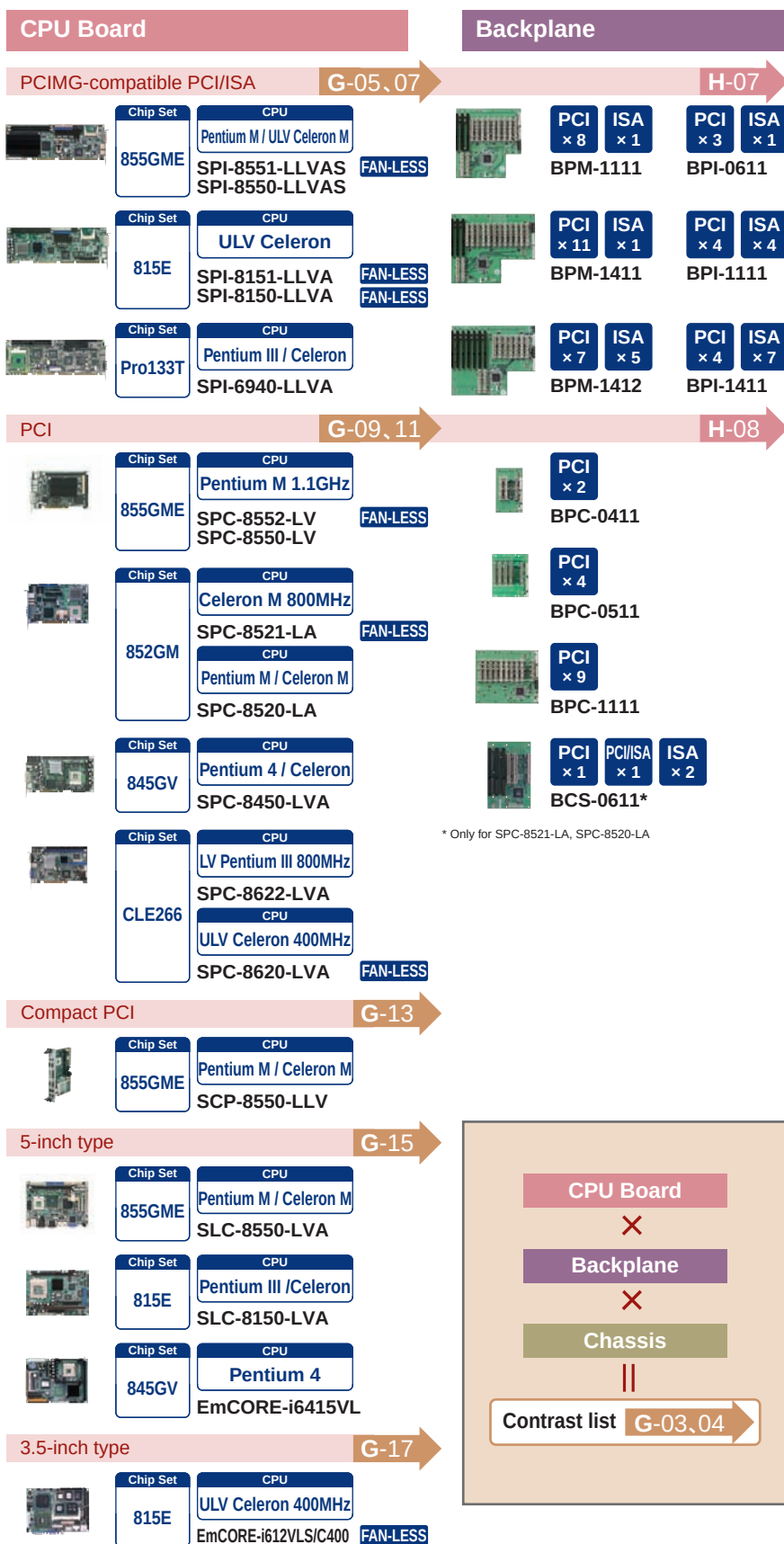
BOARD-PC

With our Board computers you are able to create a personalized industrial PC by hand-selecting the boards to integrate with the needed functionality. We have a variety of boards available to meet your needs. CONTEC provide you with various solutions including multifunctional system and compact system.



Product Lineup

You can choose from a variety of models according to your desired bus, I/O points, and onboard functions.



BOARD-PC

Chassis (Optional Backplane)

19-inch Rack-mount (4U) / Desktop

H-02

Drive Bay
InsideFull
Size

ATX

FA-UNIT-F14BE

Wall-mount / Desktop

H-03, 04

Drive Bay
InsideMiddle
Size

ATX

FA-UNIT-M6BE

Middle
Size

ATX

FA-UNIT-M11BE

Middle
Size

ATX

FA-UNIT-F11BE

Drive Bay
(Optional
Attachment)Middle
Size

ATX

FA-UNIT-M4BE

Half
Size

ATX

FA-UNIT-H4BE

Chassis (PICMG Backplane)

19-inch Rack-mount (2U)

H-02

Drive Bay
InsideFull
Size

ATX

FA-UNIT-F6BE/2U

Pictograms

CPU Board

Bus Specifications

PICMG
(PCI/ISA)
Full Size

PICMG-compliant full-size CPU board that has both PCI and ISA bus edge connectors. Deploy the board onto backplane.

Compact
PCI
6U Size

6U-size CPU board that has Compact PCI-compliant edge connector. Deploy the board onto backplane.

PCI
Half Size

Compact CPU board that has PCI-compliant edge connector. Deploy the board onto backplane.

5inch
Bay Size

5 inch drive bay-size CPU board. No backplane is required.

ISA
Half Size

Compact CPU board that has ISA bus-compliant edge connector.

3.5inch
Bay Size

3.5 inch drive bay-size CPU board. No backplane is required.

CPU

CPU
XXXXXXX

Onboard CPU - type and speed. CPU has been installed.

CPU
Option

CPU not included. Please purchase a compatible CPU separately.

FAN-
less

Fan-less operation - cooled by heat sink.

Easier maintenance and quieter operation is achieved with fan-less systems.

Chip Set

Chip Set
XXXXXXX

Type of onboard chipset.

Main Memory

Main Memory
XXXX
DDR SDRAM

Type of main memory and maximum allowable that can be installed.

Main Memory
XXXX
SDRAM

Points

Analog
RGB

Analog RGB video signal output interface (15-pin HD-SUB).

DVI

DVI video signal output interface (29-pin).

CF
(Option)

Indicates CF (Compact Flash) slot, enabling HDD-less system configuration.

SSD
(Option)

Indicates DiskOnChip [M-Systems] socket, enabling HDD-less system configuration.

Dual
LAN

Indicates 2 LAN ports.

LAN

Indicates LAN ports.

USB
2.0

Indicates USB2.0 port. Number of ports will vary depending on the product.

USB
1.1

Indicates USB1.1 port. Number of ports will vary depending on the product.

Audio

Indicates AC97-compliant audio output function. Line / mike input supported on some models.

Backplane

PCI
x□ISA
x□PCI/ISA
x□

Number of user-available slots.

ATX
AT

The chassis with ATX power or AT power is either compliant.

AT

The chassis with AT power is compliant.

Chassis

Full
SizeMiddle
SizeHalf
Size

Size of installable board.

ATX
Power

Built-in ATX power supply.

AT
Power

Built-in AT power supply.

Box-PCs

Panel-PCs

Flat Panel
DisplaysSilicon Disk
Drives

Option

Box PCs & Panel
PCs with
Windows CESingle Board
ComputerChassis /
Backplane

Analog I/O

Digital I/O

Counter &
Motion ControllerSerial
CommunicationGPIO
Communication

Remote I/O

Expansion Unit /
Bus Adapter

Software

Accessories &
CablesDistributed Monitor &
Control Network: F&EITMulti-Programmable
Display

Wireless LAN

Remote
Monitoring Solution

Service & Products

G-02

CPU Board

BOARD-PC

Box-PCs

Panel-PCs

Flat Panel Displays

Silicon Disk Drives

Option

Box PCs &Panel PCswith Windows CE

Single Board Computer

Chassis / Backplane

Analog I/O

Digital I/O

Counter & Motion Controller

Serial Communication

GPIB Communication

Remote I/O

Expansion Unit / Bus Adapter

Software

Accessories & Cables

Distributed Monitor & Control Network: F&IT

Multi-Programmable Display

Wireless LAN

Remote Monitoring Solution

Service & Products

G-03

CPU Board

CPU Board, Backplane, Chassis Compatibility Table

You can choose from a wide variety of the models to use singly or unitedly, including CPU board, Backplane, Chassis.

1. CPU Board Selection

Bus Specifications / Board Size	CPU Board	CPU
PICMG  PICMG (PCI Industrial Computers Manufacturers Group) is a group that produce specifications to enable the PCI bus to be used in industrial computers. The companies that take part in the PICMG are more than 500 in the world. (CONTEC is a PICMG member, too.) With a PICMG-compliant backplane, you can compose a computer system by using PCI bus, ISA bus and/or the other interfaces separately or unitedly. Full Size	SPI-8551-LLVAS SPI-8550-LLVAS SPI-8150-LLVA SPI-8151-LLVA SPI-6940-LLVA	● ULV Celeron M 1.0GHz (FSB400MHz) (On board) ● Pentium M 1.6G~2.0GHz (FSB400MHz) ● Celeron M 1.3G~1.5GHz (FSB400MHz) ● ULV Celeron 400MHz (On board) ● ULV Celeron 650MHz (On board) ● Celeron 566M~850MHz (FSB66MHz/100MHz) ● Celeron 1GHz~1.2GHz (FSB100MHz) ● Pentium III 500M~1GHz (FSB100MHz/133MHz) ● Pentium III 1.13G~1.26GHz (FSB133MHz)
PCI  PCI (Peripheral Components Interconnect) is a standard that has been advocated as an international bus standard by Market leader, Intel Corporation, instead of the previous standard, ISA bus. And combined with the efforts of PCIMIG they have succeeded in making PCI become common in most of PCs. The products of a 32 or 64-bit specification reach a maximum data transmission speed of 133MB/533MB per second. Half Size	SPC-8552-LV SPC-8550-LV SPC-8521-LA SPC-8520-LA Middle Size SPC-8450-LVA SPC-8622-LVA SPC-8620-LVA	● Pentium M 1.1GHz (FSB400MHz) (On board) ● Pentium M 1.1GHz (On board) ● Celeron M 800MHz (FSB400MHz) (On board) ● Pentium M 1.6G~2.0GHz (FSB400MHz) ● Celeron M 1.3G~1.5GHz (FSB400MHz) ● Pentium4 1.7G~2.8GHz (FSB400MHz/533MHz) ● Celeron 1.7G~2.6GHz (FSB400MHz) ● Celeron D 2.26G~2.8GHz (FSB533MHz) ● LV Pentium III 800MHz (On board) ● ULV Celeron 400MHz (FSB100MHz) (On board)

LV : Low Voltage
ULV: Ultra Low Voltage

BOARD-PC

2. Backplane Selection

Backplane

■ **BPI-0611**
PCI/ISA(PICMG) ×2
PCI ×3 ISA ×1

■ **BPI-1111**
PCI/ISA(PICMG) ×2
PCI ×4 ISA ×4

■ **BPM-1111**
PCI/ISA(PICMG) ×2
PCI ×8 ISA ×1

■ **BPI-1411**
PCI/ISA(PICMG) ×2
PCI ×4 ISA ×7

■ **BPM-1411**
PCI/ISA(PICMG) ×2
PCI ×11 ISA ×1

■ **BPM-1412**
PCI/ISA(PICMG) ×2
PCI ×7 ISA ×5

3. Backplane Selection

Chassis

Slot size × number

Drive Bay

FA-UNIT-F6DR

Full ×6

Standard (5-inch ×1, 3.5-inch ×2)

FA-UNIT-F6RFV ^{*2}

Full ×6

Option: PC-DBU1 (5-inch ×1, 3.5-inch ×2)

BE series

FA-UNIT-F11BE

Full×9 + Half×2

Standard (5-inch ×2, 3.5-inch ×2)

BE series

FA-UNIT-F14BE

Full×9 + Half×5

Standard (5-inch ×3, 3.5-inch ×3)

BE series

FA-UNIT-H4BE

Half ×4

Standard (2.5-inch shadow ×1)
Option: PC-DBU2 (5-inch ×1)

BE series

FA-UNIT-M4BE

Middle ×4

Standard (3.5-inch shadow ×1)
Option: PC-DBU2 (5-inch ×1)

BE series

FA-UNIT-M6BE

Middle ×6

Standard (5-inch ×1, 3.5-inch ×1
3.5-inch shadow ×1)

BE series

FA-UNIT-M11BE

Middle ×11

Standard (5-inch ×2, 3.5-inch ×2)

BE series

FA-UNIT-F11BE

Full×9 + Half×2

Standard (5-inch ×2, 3.5-inch ×2)

■ **BPC-0411**
PCI ×3

■ **BPC-0511**
PCI ×5

■ **BCS-0611** ^{*3}
PCI ×1 PCI/ISA ×1
ISA ×2

■ **BPC-1111**
PCI ×10

Box-PCs

Panel-PCs

Flat Panel
DisplaysSilicon Disk
Drives

Option

Box PCs & Panel
PCs with
Windows CESingle Board
ComputerChassis /
Backplane

Analog I/O

Digital I/O

Counter &
Motion ControllerSerial
CommunicationGPIO
Communication

Remote I/O

Expansion Unit /
Bus Adapter

Software

Accessories &
CablesDistributed Monitor &
Control Network: F&EITMulti-Programmable
Display

Wireless LAN

Remote
Monitoring Solution

Service & Products

G-04

CPU Board

*1: The installable Slot Size, Slot number is according to the unit of CPU chassis and Backplanes.

*2: It cannot be used with SPI-8450-LLVA.

*3: Only for SPC-8521-LA, SPC-8520-LA

BOARD-PC

Please refer to G-02 for the Backplane and Chassis that is compatible with CPU board.

Box-PCs
Panel-PCs
Flat Panel Displays
Silicon Disk Drives
Option
Box PCs & Panel PCs with Windows CE
Single Board Computer
Chassis / Backplane
Analog I/O
Digital I/O
Counter & Motion Controller
Serial Communication
GPIO Communication
Remote I/O
Expansion Unit / Bus Adapter
Software
Accessories & Cables
Distributed Monitor & Control Network: F&EIT
Multi-Programmable Display
Wireless LAN
Remote Monitoring Solution
Service & Products

PICMG
(PCI/ISA)
Full Size

Chip Set 855GME	Memory Max. 2GB DDR SDRAM
SATA	USB 2.0
CF (Option)	SSD (Option)
CE	

Full-size Single Board Computer for PICMG

SPI-8551-LLVAS:

CPU ULV Celeron M 1.0GHz	FAN -less	DVI	Analog RGB	Dual LAN	Audio
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SPI-8550-LLVAS:

CPU Option	FAN -less	DVI	Analog RGB	Dual LAN	Audio
---------------	--------------	-----	---------------	-------------	-------

SPI-8551-LLVAS:

- Equipped with 1.0GHz Ultra Low Voltage Intel® Celeron® M (FSB400MHz)
- Large, uniquely designed heat-sink enables fanless operation.

SPI-8550-LLVAS:

- Supports Intel® Pentium® M 1.6 - 2.0GHz (FSB400MHz) and Celeron® M 1.3 - 1.5GHz (SB400MHz)

COMMON:

- Supports up to 2GB SDRAM (max).
- 2ch Serial ATA (SATA) - supports RAID.
- On-board DVI-I and LVDS - supports Dual View.
- LCD can be connected directly to LVDS port.
- Onboard GB LAN [Intel® 82541 controller]
- Type I / II CF card slot - supports boot-up from CF card.



SPI-8551-LLVAS

G-05

CPU Board

BOARD-PC

Model	SPI-8551-LLVAS	SPI-8550-LLVAS	
CPU*1	Ultra Low Voltage Intel® Celeron® M Processor 1.0GHz (FSB400MHz) CPU on board	Intel® Pentium® M Processor 1.6GHz to 2.0GHz (FSB400MHz), Intel® Celeron® M Processor 1.3GHz to 1.6GHz (FSB400MHz) 478pin FC-PGA	
Cache	512KB (cache)	Built in CPU	
Processor socket	-	Socket 478	
Memory(Optional)	Two 184-pin DIMM sockets, PC2700 DDR SDRAM for up to 2GB, ECC support		
Chipset	Intel® 855GME + ICH4		
BIOS	Phoenix BIOS, PnP support		
VGA	Built in Intel® 855GME, One DVI-I connector, One LVDS connector		
Keyboard / Mouse connector	One PS/2 keyboard / Mouse connector (Bundled the 2 in 1 cable) , One box-header 5-pin connector for external keyboard		
Serial I/F	One box-header 10-pin connector : COM1 is RS-232C, One box-header 10-pin connector : COM2 is RS-232C/422/485		
Parallel I/F	One box-header 26-pin connector		
On-board expansion bus	-		
LAN Port	1000BASE-T/100BASE-TX/10BASE-T Intel® 82541PI 100BASE-TX/10BASE-T Intel® ICH4 Two RJ-45 connectors, Wake On LAN support		
IDE I/F	Two EIDE ports, up to four IDE devices, support Ultra DMA 33/66/100 *2, Two box-header 40-pin connector		
SATA I/F	Two Serial ATA 1.0 compliant ports, RAID0/1 support		
FDD I/F	One box-header 34-pin connector, 2 mode		
Compact Flash Slot	One CF card(Type I / II) slot, Support boot-up from a card		
SSD Socket	-		
USB Port	6ch USB2.0 compliant ports, Three box-header 10-pin connector		
RAID	RAID 0/1 support (SATA I/F)		
Audio	AC97 CODEC, One pin-header 10-pin connector (speaker-out, line-in, microphone-in)		
Watchdog Timer	255 levels (1 - 255Sec.). Reset occurrence at the time of time up.		
Hardware Monitor	Monitoring of the temperature of CPU and board, power supply voltage, and fan speed		
RTC	The backup time of the CR2450 battery is over 7 years at 25°C.		
Power Management	Power management setup via BIOS, Modem Ring On/Wake On LAN, Supports PC98/PC99 ACPI Power management		
Bus specification / Size	PICMG / 338mm (L) × 122mm (H) [13.3 inch × 4.8 inch]		
Power consumption (Max.)	+5VDC, 5.2A; +12VDC, Depends on the the external fan; +5VSB (Stand by), 0.5A	[Pentium M 1.6GHz] +5VDC, 9.0A; +12VDC, 0.25A; +5VSB (Stand by), 0.5A	
Operating temperature / Humidity	0~50°C, 10~90%RH (No condensation)	0~60°C, Depends on the specification of CPU and heat sink.10~90%RH (No condensation)	
Weight	880g [31.0 oz]	480g [16.9 oz]	
Note:	*1: Please visit our website for updated information on supported CPUs. *2: Secondary IDE port cannot be set to UltraDMA/66/100 when CF card is used. *3: RAID drives do not support hot swap. PC-ESD series and PC-SDD cannot use RAID drives.		

Options for CPU Board

SPI-8551-LLVAS / SPI-8550-LLVAS	
CPU (with FAN) for SPI-8550-LLVAS	
PCPM-16F	Pentium M 1.6GHz
PCPMC-13F	Celeron M 1.3GHz
Memory (PC2700 SDRAM Non-Parity)	
PC-MDD256-184A	DDR SDRAM DIMM (PC2700, 256MB)
PC-MDD512-184A	DDR SDRAM DIMM (PC2700, 512MB)
CABLE	
USB Connector Cable	USB connector shielded cable
IDE-66 Cable	IDE Ultra ATA100/66 (80-pin Ribbon Cable)

Box-PCs
Panel-PCs
Flat Panel Displays
Silicon Disk Drives
Option
Box PCs & Panel PCs with Windows CE
Single Board Computer
Chassis / Backplane
Analog I/O
Digital I/O
Counter & Motion Controller
Serial Communication
GPIO Communication
Remote I/O
Expansion Unit / Bus Adapter
Software
Accessories & Cables
Distributed Monitor & Control Network: F&EIT
Multi-Programmable Display
Wireless LAN
Remote Monitoring Solution
Service & Products

G-06

CPU Board

BOARD-PC

Please refer to G-02 for the Backplane and Chassis that is compatible with CPU board.

Box-PCs

Panel-PCs

Flat Panel Displays

Silicon Disk Drives

Option

Box PCs & Panel PCs with Windows CE

Single Board Computer

Chassis / Backplane

Analog I/O

Digital I/O

Counter & Motion Controller

Serial Communication

GPIB Communication

Remote I/O

Expansion Unit / Bus Adapter

Software

Accessories & Cables

Distributed Monitor & Control Network: F&EIT

Multi-Programmable Display

Wireless LAN

Remote Monitoring Solution

Service & Products

G-07

CPU Board

PICMG
(PCI/ISA)
Full Size

Chip Set 815E	Memory Max. 512MB SDRAM
USB 1.1	CF (Option)
SSD (Option)	CE

Full-size Single Board Computer for PICMG

SPI-8151-LLVA

CPU ULV Celeron 650MHz	FAN -less	DVI	Analog RGB	Dual LAN	Audio
------------------------------	--------------	-----	---------------	-------------	-------

SPI-8150-LLVA

CPU ULV Celeron 400MHz	FAN -less	DVI	Analog RGB	Dual LAN	Audio
------------------------------	--------------	-----	---------------	-------------	-------

SPI-8151-LLVA:

- Equipped with 650MHz Ultra Low Voltage Intel® Celeron®.

SPI-8150-LLVA:

- Equipped with 400MHz Ultra Low Voltage Intel® Celeron®.

COMMON:

- Type I / II CF card slot - supports boot-up from CF card.
- DVI interface allows interconnection with panel-link type LCD.
- AC97-compliant audio
- Operated by 5V single power source



SPI-8150-LLVA


PICMG
(PCI/ISA)
Full Size

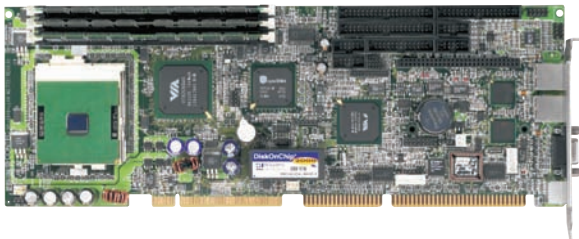
Chip Set Pro133T	Memory Max. 1.5GB SDRAM
USB 1.1	CF (Option)
SSD (Option)	CE

Full-size Single Board Computer for PICMG

SPI-6940-LLVA

CPU Option	FAN -less	Analog RGB	Dual LAN	Audio
---------------	--------------	---------------	-------------	-------

- Supports Intel® Pentium® III 500MHz-866MHz, 1.13-1.26GHz and Celeron® 566-850MHz, 1-1.2GHz (Socket370).
- Supports up to 1.5GB SDRAM (max).
- VGA provided by Lynx SM722 [VRAM 8MB provided by chipset].
- On-board LCD interface - Optional board [ADP-6940] provides PanelLink interface.
- Equipped with 2x RJ-45 LAN ports [Intel 82559].
- AC97-compliant audio



As shown on the side of product's images, RoHS compliant  is a CONTEC original marking for RoHS-compliant

BOARD-PC

Model	SPI-8151-LLVA	SPI-8150-LLVA	SPI-6940-LLVA	
CPU*1	Ultra Low Voltage, Intel® Celeron® Processor 650MHz, CPU on board	Ultra Low Voltage, Intel® Celeron® Processor 400MHz, CPU on board	Intel® Celeron® (FSB66MHz/ 100MHz) up to 850MHz Intel® Celeron® (FSB100MHz) up to 1.2GHz Intel® Pentium® III (FSB100MHz/ 133MHz) up to 866MHz Intel® Pentium® III (FSB133MHz) up to 1.26GHz	
Cache	256KB (L2 cache)		Built in CPU	
Processor socket	-		Socket 370	
Memory(Optional)	Two DIMM sockets, PC100/133 SDRAM for up to 512MB		Three 168-pin DIMM sockets, PC133 SDRAM for up to 1.5GB, ECC support	
Chipset	Intel® 815E		VIA Apollo Pro133T VT82C694T	
BIOS	Award BIOS, PnP support			
VGA	Built in Intel® 815E, One DVI-I connector		Lynx SM722 chipset, VRAM 8M, One 15-pin HD-SUB connector	
Keyboard / Mouse connector	One PS/2 keyboard / Mouse connector (Bundled the 2 in 1 cable), One box-header 5-pin connector for external keyboard		One PS/2 keyboard / Mouse connector (Bundled the 2 in 1 cable), One box-header 5-pin connector for external keyboard	
Serial I/F	One box-header 10-pin connector : COM1 is RS-232C, One box-header 10-pin connector : COM2 is RS-232C/422/485			
Parallel I/F	One box-header 26-pin connector			
On-board expansion bus	PC/104		-	
LAN Port	100BASE-TX/10BASE-T Intel® ICH2, 82551 Two RJ-45 connectors, Wake On LAN support		100BASE-TX/10BASE-T Intel 82559ER, Two RJ-45 connectors	
IDE I/F	Two box-header 40-pin connector, Support Ultra DMA 33/66/100 *1		Two box-header 40-pin connector, support Ultra DMA 33/66/100	
SATA I/F	-			
FDD I/F	One box-header 34-pin connector, 2 mode			
Compact Flash Slot	One CF card (Type I / II) slot, Support boot-up from a card		-	
SSD Socket	DIP socket supports DiskOnChip flash disks (2MB to 144MB)		DIP socket supports DiskOnChip flash disks (4MB to 288MB)	
USB Port	4ch USB 1.1compliant ports, Two box-header 10-pin connector			
RAID	-			
Audio	AC97 CODEC, One pin-header 10-pin connector (speaker-out, line-in, microphone-in)			
Watchdog Timer	15 levels, Reset or NMI (Jumper selectable)			
Hardware Monitor	Monitoring of the temperature of CPU and board, power supply voltage, and fan speed			
RTC	The backup time of the lithium battery is over 7 years at 25°C.		The backup time of the Lithium Battery is over 3 years at 25°C.	
Power Management	Power management setup via BIOS, Modem Ring On/Wake On LAN Supports PC98/PC99 ACPI Power management		-	
Bus specification / Size	PICMG / 338mm (L) × 122mm (H) [13.3 inch × 4.8 inch]			
Power consumption (Max.)	+5VDC, 6.0A +5VSB, 0.3A	+5VDC, 4.2A +5VSB , 0.3A	[Pentium 3 FC-PGA2 1.26GHz] +5VDC, 13.0A, +12VDC, 0.5A +5VSB (Stand by), 1.0A	
Operating temperature/ Humidity	0~60°C, 10~90%RH (No condensation)			
Weight	420g [14.8 oz]		400g [14.1 oz]	
Note:	*1: Please visit our website for updated information on supported CPUs. *2: Secondary IDE port cannot be set to UltraDMA/66/100 when CF card is used.			

Box-PCs

Panel-PCs

Flat Panel
DisplaysSilicon Disk
Drives

Option

Box PCs &Panel
PCswith
Windows CESingle Board
ComputerChassis /
Backplane

Analog I/O

Digital I/O

Counter &
Motion ControllerSerial
CommunicationGPIB
Communication

Remote I/O

Expansion Unit /
Bus Adapter

Software

Accessories &
CablesDistributed Monitor &
Control Network: F&I/TMulti-Programmable
Display

Wireless LAN

Remote
Monitoring Solution

Service & Products

G-08

CPU Board

Options for CPU Board

SPI-8151-LLVA / SPI-8150-LLVA	
Memory (PC2700 SDRAM Non-Parity)	
PC-MSD128-168V	SDRAM DIMM 128MB
PC-MSD256-168V	SDRAM DIMM 256MB
PC-MSD512-168V	SDRAM DIMM 512MB
CABLE	
USB Connector Cable	USB connector shielded cable
IDE-66 Cable	IDE Ultra ATA100/66 (80-pin Ribbon Cable)

SPI-6940-LLVA	
CPU	
PC686C-566	Celeron 566MHz
PC686C-850	Celeron 850MHz
PC686-700	Pentium III 700MHz
PC686-850	Pentium III 850MHz
PC686-1260	Pentium III Tualatin 1.26GHz
Memory (PC133 SDRAM, Non-Parity)	
PC-MSD128-168V	SDRAM DIMM 128MB
PC-MSD256-168V	SDRAM DIMM 256MB
PC-MSD512-168V	SDRAM DIMM 512MB
Memory (PC133 SDRAM, ECC)	
PC-MSD512E-168V	SDRAM DIMM 512MB ECC
LCD adapter board	
ADP-6940 *1	LCD adapter board
CABLE	
USB Connector Cable	USB connector shielded cable
IDE-66 Cable	IDE Ultra ATA100/66 (80-pin Ribbon Cable)

*1: Occupies 1 slot.

BOARD-PC

Box-PCs

Panel-PCs

Flat Panel Displays

Silicon Disk Drives

Option

Box PCs & Panel PCs with Windows CE

Single Board Computer

Chassis / Backplane

Analog I/O

Digital I/O

Counter & Motion Controller

Serial Communication

GPIB Communication

Remote I/O

Expansion Unit / Bus Adapter

Software

Accessories & Cables

Distributed Monitor & Control Network: F&EIT

Multi-Programmable Display

Wireless LAN

Remote Monitoring Solution

Service & Products

G-09

CPU Board

PCI
Half Size

Chip Set 855GME	Memory Max. 1GB DDR SDRAM
USB 2.0	CF (Option)
SSD (Option)	CE

Half-size Single Board Computer for PCI

SPC-8552-LV

CPU Pentium M 1.1GHz	FAN-less	DVI	Analog RGB	LAN	Audio
----------------------------	----------	-----	------------	-----	-------

SPC-8550-LV

CPU Pentium M 1.1GHz	FAN-less	DVI	Analog RGB	LAN	Audio
----------------------------	----------	-----	------------	-----	-------

SPC-8552-LV:

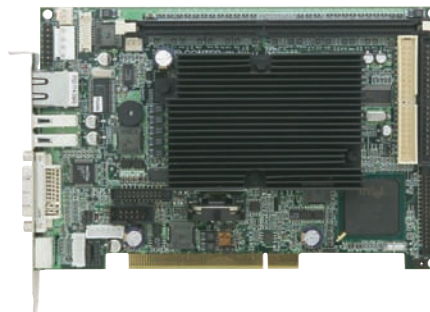
- Large, uniquely designed heat-sink enables fanless operation.

SPC-8550-LV:

- CPU includes fan eliminating overheating problems.

COMMON:

- Equipped with Intel® Pentium® M 1.1GHz, FSB 400MHz
- Intel 855GME+ICH4 chip set.
- Supports up to 1GB PC2700, 333MHz, ECC-compliant SDRAM (max).
- ATAC-1, the optional COM & audio port adapter, will provide RS232/422/485 compliant serial and AC97 compliant audio functions.



SPC-8552-LV

PCI
Half Size

Chip Set 855GME	Memory Max. 1GB DDR SDRAM
USB 2.0	CF (Option)
SSD (Option)	

Half-size Single Board Computer for PCI

SPC-8521-LA

CPU Celeron M 800MHz	FAN-less	Analog RGB	LAN	Audio
----------------------------	----------	------------	-----	-------

SPC-8520-LA

CPU Option	FAN-less	Analog RGB	LAN	Audio
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SPC-8521-LA:

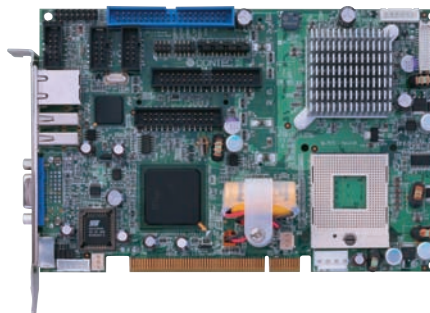
- Equipped with fanless Intel® Celeron® M 800MHz.

SPC-8520-LA:

- Supports Intel® Pentium® M 1.6G~2.0GHz, Supports Intel® Celeron® M 1.3G~1.5GHz.

COMMON:

- Half-size CPU Board is equipped with a variety of interfaces including IDE, USB2.0×2, Serial×2, Parallel, PS/2, LAN, Audio.
- Intel® 852GM+ICH4 chip set.
- Supports up to 1GB DDR SDRAM SO-DIMM (Max.)
- Analog RGB and LVDS interfaces allow supporting Dual View.
- LVDS interface allows interconnection with panel-link type LCD.
- Type I CF card slot - supports boot-up from CF card.



SPC-8520-LA



BOARD-PC

Model	SPC-8552-LV	SPC-8550-LV	SPC-8521-LA	SPC-8520-LA	
CPU*1	Intel® Pentium® M Processor 1.1GHz (FSB400MHz), Fan-less CPU on board	Intel® Pentium® M Processor 1.1GHz (FSB400MHz), 0.3 micro FC-BGA package), Life Time of a fan: 50,000 Hours	Intel® Celeron® M Processor 800MHz (FSB400MHz), Fan-less CPU on board	Intel® Pentium® M Processor 1.6G~2.0GHz (FSB400MHz), Intel® Celeron® M Processor 1.3G~1.50GHz (FSB400MHz), 478-pin FC-PGA	
Cache	1MB (L2 cache)		-	Built in CPU	
Processor socket	-		-	Socket 478	
Memory(Optional)	One 184-pin DIMM socket, PC2700 DDR SDRAM for up to 1GB, ECC support		One 200-pin (L2 Cache) socket, PC2100(DDR266) DDR SDRAM for up to 1GB		
Chipset	Intel® 855GME + ICH4		Intel® 852GM + ICH4		
BIOS	Phoenix BIOS, PnP support		Award BIOS, PnP support		
VGA	Built in Intel® 855GME, One DVI-I connector		Built in Intel® 852GM, One Analog RGB interface (15-pin HD-SUB connector), One LVDS (18bit) interface (30-pin box-header connector)		
Keyboard / Mouse connector	One PS/2 keyboard / Mouse connector (Bundled the 2 in 1 cable), One box-header 5-pin connector for external keyboard		One box-header 10-pin connector: COM1 is RS-232C, One box-header 10-pin connector: COM2 is RS-232C/422A/485		
Serial I/F	One box-header 10-pin connector: COM1 is RS-232C, Option: ATCA-1 (RS-232C/422/485) *2		One box-header 10-pin connector: COM1 is RS-232C, One box-header 10-pin connector: COM2 is RS-232C/422A/485		
Parallel I/F	One box-header 26-pin connector		One box-header 26-pin connector		
On-board expansion bus	-				
LAN Port	100BASE-TX/10BASE-T Intel® ICH4 One RJ-45 connector, Wake On LAN support				
IDE I/F	Two box-header 40-pin connector, support Ultra DMA 33/66/100		One box-header 40-pin connector, support Ultra DMA 33/66/100		
SATA I/F	-				
FDD I/F	One box-header 34-pin connector, 2 mode				
Compact Flash Slot	-		One CF card (Type I) slot, Support boot-up from a card		
SSD Socket	-				
USB Port	2ch USB2.0 compliant ports, Two USB A type connector				
RAID	-				
Audio	Option : ATCA-1 (AC97 CODEC, speaker-out, line-in, microphone-in)		AC97 CODEC, One pin-header 10-pin connector (line-out, line-in, microphone-in)		
Watchdog Timer	255 levels (1 - 255Sec.). Reset occurrence at the time of time up.				
Hardware Monitor	Monitoring of the temperature of CPU and board, power supply voltage, and fan speed				
RTC	The backup time of the Lithium battery is over 7 years at 25°C.		The backup time of the Lithium battery is over 10 years at 25°C.		
Power Management	Power management setup via BIOS, Modem Ring On/Wake On LAN, Supports PC98/PC99 ACPI Power management				
Bus specification / Size	PCI / 185mm (L) × 122mm (H) [7.28 inch × 4.8 inch]		PCI / 185mm(L)×122mm(H)×41mm(W)*3	PCI / 185mm(L)×122mm(H)×28mm(W)	
Power consumption (Max.)	+5VDC, 9.0A +12VDC, 0.2A (FAN power of SPC-8550-LV) +5VSB (Stand by), 2.0A		+5VDC±5%, 5.0A +5VSB (Stand by)±5%, 0.5A	[Pentium M 1.6GHz] +5VDC±5%, 9.0A +12VDC±5%, 0.1A (Average, for fan) +5VSB (Stand by)±5%, 0.5A	
Operating temperature / Humidity	0~60°C *5 0~50°C *6 10~90%RH (No condensation)	0~60°C / 10~90%RH (No condensation)	0~50°C / 10~90%RH (No condensation)	0~60°C*4 / 10~90%RH (No condensation)	
Weight	428g [15.1 oz]	315g [11.1 oz]	450g	390g	

Note:

*1: Please visit our website for updated information on supported CPUs.

*2: ATCA-1, the optional COM & audio port adapter, will provide RS232/422/485 compliant serial and AC97 compliant audio functions.

*3: The one up to 122mm or less in the size of board can be used for two next slots of this board (one substance slot).

*4: Depends on the specification of the CPU and the heat-sink.

*5: Air flow to Heat Sink: over 0.7m/s.

*6: Air flow to Heat Sink: over 0.5m/s.

Options for CPU Board

SPC-8552-LV / SPC-8550-LV	
Memory (PC2700 DDR SDRAM, ECC not support)	
PC-MDD256-184A	DDR SDRAM DIMM (PC2700, 256MB)
PC-MDD512-184A	DDR SDRAM DIMM (PC2700, 512MB)
Adaptor terminal	
ATCA-1	COM & Audio port

SPC-8521-LA	
Memory (PC2100 SDRAM Non-Parity)	
PC-MDD256-200	200-pin SO-DIMM DDR (PC2100, 256MB)
PC-MDD512-200	200-pin SO-DIMM DDR (PC2100, 512MB)
PC-MDD1G-200	200-pin SO-DIMM DDR (PC2100, 1GB)

SPC-8520-LA	
CPU	
CPUPM-16	Pentium M 1.6GHz
CPUPMC-15	Celeron M 1.5GHz
CPUPMC-13	Celeron M 1.3GHz
Heat sink fan [for SPC-8520-LA]	
HSF-PM	For Pentium M or Celeron M
Memory (PC2100 SDRAM Non-Parity)	
PC-MDD256-200	200-pin SO-DIMM DDR (PC2100, 256MB)
PC-MDD512-200	200-pin SO-DIMM DDR (PC2100, 512MB)
PC-MDD1G-200	200-pin SO-DIMM DDR (PC2100, 1GB)

Box-PCs

Panel-PCs

Flat Panel
DisplaysSilicon Disk
Drives

Option

Box PCs &Panel
PCswith
Windows CESingle Board
ComputerChassis /
Backplane

Analog I/O

Digital I/O

Counter &
Motion ControllerSerial
CommunicationGPIB
Communication

Remote I/O

Expansion Unit /
Bus Adapter

Software

Accessories &
CablesDistributed Monitor &
Control Network: F&EITMulti-Programmable
Display

Wireless LAN

Remote
Monitoring Solution

Service & Products

G-10

CPU Board

BOARD-PC

Box-PCs

Panel-PCs

Flat Panel Displays

Silicon Disk Drives

Option

Box PCs & Panel PCs with Windows CE

Single Board Computer

Chassis / Backplane

Analog I/O

Digital I/O

Counter & Motion Controller

Serial Communication

GPIB Communication

Remote I/O

Expansion Unit / Bus Adapter

Software

Accessories & Cables

Distributed Monitor & Control Network: F&EIT

Multi-Programmable Display

Wireless LAN

Remote Monitoring Solution

Service & Products

G-11

CPU Board

PCI
Middle Size
Chip Set
845GVMemory
Max. **1GB**
DDR SDRAMUSB
2.0CF
(Option)SSD
(Option)

CE

Middle-size Single Board Computer for PCI

SPC-8450-LVA

CPU
OptionFAN
-less

DVI

Analog
RGB

LAN

Audio

- Supports Intel® Pentium® 4 1.7 - 2.8GHz (FSB400/533MHz) and Celeron® 1.7 - 2.6GHz (FSB400MHz), Intel® Celeron® D 2.26 - 2.8GHz (FSB533MHz).
- Pentium® 4 solution on half-size PCI board.
- Supports up to 1GB SDRAM (max).
- Type I / II CF card slot - supports boot-up from CF card.
- Equipped with DVI-I I/F, enabling connection with the CONTEC Touch panel type LCD display.


PCI
Half Size
Chip Set
CLE266Memory
Max. **512MB**
DDR SDRAMUSB
2.0CF
(Option)SSD
(Option)

CE

Half-size Single Board Computer for PCI

SPC-8622-LVA

CPU
LV Pentium III
800MHzFAN
-lessAnalog
RGB

LAN

Audio

SPC-8620-LVA

CPU
ULV Celeron
400MHzFAN
-lessAnalog
RGB

LAN

Audio

SPC-8622-LVA

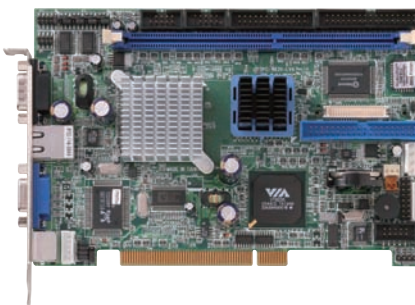
- Equipped with Low Voltage Intel® Pentium® III 800MHz.

SPC-8620-LVA

- Equipped with Ultra Low Voltage Intel® Celeron® 400 MHz.
- Operated by 5V single power source

COMMON:

- Supports up to 512MB high-speed PC2100 DDR SDRAM (max).
- Type I CF card slot - supports boot-up from CF card.



SPC-8620-LVA

BOARD-PC

Model	SPC-8450-LVA	SPC-8622-LVA	SPC-8620-LVA	
CPU*1	Intel® Pentium® 4 Processor 1.7GHz to 2.8GHz (FSB 400/533MHz) Intel® Celeron® Processor 1.7GHz to 2.6GHz (FSB 400MHz) (Northwood Core only) Intel® Celeron® D Processor 2.26GHz to 2.8GHz (FSB 533MHz)	Low Voltage Intel® Pentium® III Processor 800MHz, CPU on board	Ultra Low Voltage Intel® Celeron® Processor 400MHz, CPU on board	
Cache	Built in CPU	512KB (L2 cache)	256KB (L2 cache)	
Processor socket	Soket 478	-		
Memory(Optional)	One 200-pin SO-DIMM socket, PC2100 DDR SDRAM for up to 1GB	One 184-pin DIMM socket, PC2100 DDR SDRAM for up to 512KB		
Chipset	Intel® 845GV + ICH4	VIA CLE266 (VT8623 + VT8235)		
BIOS	Award BIOS, PnP support			
VGA	Built in Intel® 845GV, One DVI connector	Built in VIA VT8623, One 15-pin HD-SUB connector		
Keyboard / Mouse connector	One PS/2 keyboard / Mouse connector	(Bundled the 2 in 1 cable), One box-header 5-pin connector for external keyboard		
Serial I/F	One box-header 10-pin connector: COM1 is RS-232C, One box-header 10-pin connector: COM2 is RS-232C/422/485	One 9-pin D-SUB connector : COM1 is RS-232C, One box-header 10-pin connector : COM2 is RS-232C/422/485		
Parallel I/F	One box-header 26-pin connector			
On-board expansion bus	-			
LAN Port	100BASE-TX/10BASE-T Intel® ICH4 One RJ-45 connectors, Wake On LAN support	100BASE-TX/10BASE-T Realtek RT8139D One RJ-45 connector, Wake On LAN support		
IDE I/F	One box-header 40-pin connector, support Ultra DMA 33/66/100			
SATA I/F	-			
FDD I/F	One box-header 34-pin connector, 2 mode			
Compact Flash Slot	One CF card(Type I / II) slot, Support boot-up from a card	One CF card (Type I) slot, Support boot-up from a card		
SSD Socket	-			
USB Port	3ch USB2.0 compliant ports, One USB A type connector, One box-header 10-pin connector	2ch USB 1.1 compliant ports, One box-header 10-pin connector		
RAID	-			
Audio	AC97 CODEC, One pin-header 10-pin connector (speaker-out, line-in, microphone-in)			
Watchdog Timer	255 levels (1 - 255Sec.). Reset occurrence at the time of time up.			
Hardware Monitor	Monitoring of the temperature of CPU and board, power supply voltage, and fan speed			
RTC	The backup time of the Lithium Battery is over 7 years at 25°C.			
Power Management	Power management setup via BIOS, Modern Ring On/Wake On LAN, Supports PC98/PC99 ACPI Power management			
Bus specification / Size	PCI / 223mm(L)×122mm(H) [8.8 inch×4.8 inch]	PCI / 185mm (L)×122mm (H) [7.28 inch×4.8 inch]		
Power consumption (Max.)	[Pentium 4 2.4GHz] +5VDC, 5.40A +12VDC, 6.20A +5VSB (Stand by), 0.65A	+5VDC, 5.4A +12VDC, 0.5A +5VSB (Stand by), 1.2A	+5VDC, 4.0A +5VSB (Stand by), 1.2A	
Operating temperature / Humidity	0~60°C *2 / 10~90%RH (No condensation)	0~60°C / 10~90%RH (No condensation)		
Weight	390g [13.7 oz]	300g [10.6 oz]		

Note: *1: Please visit our website for updated information on supported CPUs.
*2: Depends on the specification of CPU and heat sink.

Box-PCs

Panel-PCs

Flat Panel Displays

Silicon Disk Drives

Option

Box PCs & Panel PCs with Windows CE

Single Board Computer

Chassis / Backplane

Analog I/O

Digital I/O

Counter & Motion Controller

Serial Communication

GPIB Communication

Remote I/O

Expansion Unit / Bus Adapter

Software

Accessories & Cables

Distributed Monitor & Control Network: F&I/T

Multi-Programmable Display

Wireless LAN

Remote Monitoring Solution

Service & Products

G-12

CPU Board

Options for CPU Board

SPC-8450-LVA	
CPU (with FAN)	
PCP4-24	Pentium 4 2.4GHz *1
PCP4-28S	Pentium 4 2.8GHz *2
PCP4C-20	Celeron 2.0GHz *1
PCP4C-20S	Celeron 2.0GHz *2
Memory (PC2100 SDRAM Non-Parity)	
PC-MDD256-200	200-pin SO-DIMM DDR (PC2100, 256MB)
PC-MDD512-200	200-pin SO-DIMM DDR (PC2100, 512MB)
PC-MDD1G-200	200-pin SO-DIMM DDR (PC2100, 1GB)
CABLE	

USB Connector Cable USB connector shielded cable

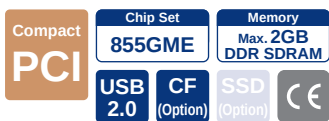
*1: Due to the size of the attached heat sink and fan, three (3) adjacent slots are unusable.

*2: Due to the size of the attached heat sink and fan, only boards that are 120mm or shorter can be used in the adjacent four (4) slots.

SPC-8622-LVA / SPC-8620-LVA	
Memory	
PC-MDD256-184	184-pin DDR SDRAM (PC2100, 256MB)
PC-MDD512-184	184-pin DDR SDRAM (PC2100, 512MB)
CABLE	
USB Connector Cable	USB connector shielded cable

BOARD-PC

Box-PCs
Panel-PCs
Flat Panel Displays
Silicon Disk Drives
Option
Box PCs & Panel PCs with Windows CE
Single Board Computer
Chassis / Backplane
Analog I/O
Digital I/O
Counter & Motion Controller
Serial Communication
GPIO Communication
Remote I/O
Expansion Unit / Bus Adapter
Software
Accessories & Cables
Distributed Monitor & Control Network: F&EIT
Multi-Programmable Display
Wireless LAN
Remote Monitoring Solution
Service & Products



6U Single Board Computer for Compact PCI

SCP-8550-LLV



- Supports Intel® Pentium® M 1.6 - 2.0GHz (FSB400MHz) and Celeron® M 1.3 - 1.5GHz (FSB400MHz)
- CPCI-compliant 6U double-slot SBC - standard features include 2× LAN and 2× display interfaces(analog RGB, DVI-D)
- Intel 855GME+ICH4 chip set.
- Supports up to 2GB ECC DDR SDRAM as main system memory.
- Type I / II CF card slot - supports boot-up from CF card. And 1× 2.5" HDD can be installed on card.
- Supports rear access interface for IDE, FDD, keyboard/mouse, serial / parallel ports, analog RGB and USB. Rear panel I/O board optionally available. (SCP-RPIO-01)

Model	SCP-8550-LLV
CPU*1	Intel® Pentium® M Processor 1.6GHz to 2.0GHz (FSB400MHz) Intel® Celeron® M Processor 1.3GHz to 1.5GHz (FSB400MHz)
Cache	Built in CPU
Processor socket	Socket 478
Memory(Optional)	Two 184-pin DIMM sockets, PC2700 DDR SDRAM for up to 2GB, ECC support
Chipset	Intel® 855GME + ICH4
BIOS	Phoenix BIOS, PnP support
VGA	Built in Intel® 855GME, One 15-pin HD-SUB connector, CPCI J4 connector *1*2, One DVI-I connector *4
Keyboard / Mouse connector	Two PS/2 keyboard / Mouse connector, CPCI J5 connector *1*2
Serial I/F	Two 9-pin D-SUB RS-232C connector, CPCI J5 connector *1*2
Parallel I/F	One 25-pin D-SUB connector, CPCI J5 connector *1*2
On-board expansion bus	-
LAN Port	100BASE-T/100BASE-TX/10BASE-T Intel® 82541PI 100BASE-TX/10BASE-T Intel® ICH4 Two RJ-45 connectors, Wake On LAN support Two EIDE ports, support Ultra DMA 33/66/100
IDE I/F	Primary: 2.5 inches IDE, CPCI J5 connector *2*3 Secondary: CF connector, CPCI J4 connector *2*3
SATA I/F	-
FDD I/F	3.5" 2 mode, CPCI J4 connector *2
Compact Flash Slot	One CF card (Type I / II) slot, Support boot-up from a card
SSD Socket	-
USB Port	6ch USB2.0 compliant ports, Four USB A type connector, Two CPCI J5 connector *2
RAID	-
Audio	-

Watchdog Timer	255 levels (1 - 255Sec.). Reset occurrence at the time of time up.
Hardware Monitor	Monitoring of the temperature of CPU and board, power supply voltage, and fan speed
RTC	The backup time of the lithium battery is over 7 years at 25°C.
Power Management	Power management setup via BIOS, Modem Ring On/Wake On LAN Supports PC98/PC99 ACPI Power management
Bus specification / Size	CompactPCI (6U Double slots) 160.0mm (L) × 233.4mm (H)
Power consumption (Max.)	[Pentium® M 1.6 GHz] +5VDC, 9.0A +12VDC, 0.25A [Power for FAN]
Operating temperature/ Humidity	0~50°C / 10~90%RH (No condensation)
Weight	680g [23.9 oz]
Note:	*1: Connectors on the front panel cannot be used at the same time as the signals for the J4 and J5 on-board connections. *2: SCP-RPIO-01 (rear panel I/O board) and supporting CPCI backplane required when using J4 and J5 connectors. *3: A maximum of two drives can be installed on primary and secondary IDE connections. Secondary IDE port cannot be set to Ultra DMA/66/100 when CF card is used. *4: DVI-D connector only supports digital (panel link) style displays. Analog RGB displays cannot be connected.

Options for CPU Board

SCP-8550-LLV	
CPU (with FAN) for SCP-8550-LLV	
PCPM-16F	Pentium M 1.6GHz (with heat sink and fan)
PCPMC-13F	Celeron M 1.3GHz (with heat sink and fan)
Memory (PC2700 DDR SDRAM DIMM, ECC not support)	
PC-MDD256-184A	DDR SDRAM DIMM (PC2700, 256MB)
PC-MDD512-184A	DDR SDRAM DIMM (PC2700, 512MB)
Other	
SCP-RPIO-01	Rear panel I/O board

BOARD-PC

Box-PCs

Panel-PCs

Flat Panel
Displays

Silicon Disk
Drives

Option

Box PCs &Panel
PCswith
Windows CE

Single Board
Computer

Chassis /
Backplane

Analog I/O

Digital I/O

Counter &
Motion Controller

Serial
Communication

GPIB
Communication

Remote I/O

Expansion Unit /
Bus Adapter

Software

Accessories &
Cables

Distributed Monitor &
Control Network: F&I/T

Multi-Programmable
Display

Wireless LAN

Remote
Monitoring Solution

Service & Products

G-14

CPU Board

BOARD-PC

Box-PCs

Panel-PCs

Flat Panel Displays

Silicon Disk Drives

Option

Box PCs & Panel PCs with Windows CE

Single Board Computer

Chassis / Backplane

Analog I/O

Digital I/O

Counter & Motion Controller

Serial Communication

GPIB Communication

Remote I/O

Expansion Unit / Bus Adapter

Software

Accessories & Cables

Distributed Monitor & Control Network: F&IT

Multi-Programmable Display

Wireless LAN

Remote Monitoring Solution

Service & Products

G-15

CPU Board

5inch
Bay Size

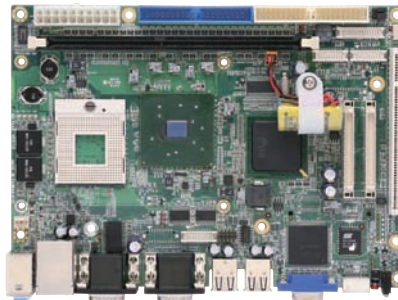
Chip Set 855GME	Memory Max. 1GB DDR SDRAM
USB 2.0	CF (Option)
	SSD (Option)

5-inch Single Board Computer
for Socket478 (Pentium M)

SLC-8550-LVA

CPU Option	FAN -less	Analog RGB	LAN	Audio
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- Supports Intel® Pentium® M 1.6G~2.0GHz, Intel® Celeron® M 1.3G~1.5GHz
- Intel® 855GME+ICH4 chip set
- Supports up to 1GB DDR SDRAM, ECC support
- Supports interfaces for Analog RGB, LVDS, EIDE, 6 serial(RS-232C) ports, and 6 USB.
- Analog RGB and LVDS interfaces allow supporting Dual View.
- LVDS interface enables the direct connection to an LCD monitor.
- Type I CF card slot - supports boot-up from CF card.



SLC-8550-LVA

5inch
Bay Size

Chip Set 845GV	Memory Max. 1GB DDR SDRAM
USB 2.0	CF (Option)
	SSD (Option)

5-inch Single Board Computer
for Socket478 (Pentium 4)

EmCORE-i6415VL

CPU Option	FAN -less	Analog RGB	LAN	Audio
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*Cables are not included. Please purchase the cable kit.
*Manual is not included. Please download from our website.



- Comes in 5-inch bay size and is standardly equipped with various I/F including: LAN, VGA/LVDS output, EIDE, USB20×4, COM×4, Parallel, PS/2 and Audio.
- Supports Intel® Pentium® 4 2.4 - 3.06GHz (FSB400MHz/533MHz)
- Intel® 845GV + ICH4 chip set.
- Supports up to 1GB DDR SDRAM (max).
- Equipped with PCI bus slot and expansion bus for Mini PCI connector.
- LVDS interface enables the direct connection to an LCD monitor.
- Dual View using 2 display units supported.

5inch
Bay Size

Chip Set 815E	Memory Max. 512MB SDRAM
USB 1.1	CF (Option)
	SSD (Option)

5-inch Single Board Computer
for Socket370 (Pentium III)

SLC-8150-LVA

CPU Option	FAN -less	Analog RGB	LAN	Audio
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- Compact 5" size optimal for embedded systems
- Supports Intel® Pentium III 500MHz - 1.26GHz and Celeron® 300 - 850MHz (Socket370).
- 4 serial(COM) ports [3× RS-232C / 1× RS-232C/422/485 - jumper selectable]
- Supports multiple expansion buses (PISA, PC/104 and MiniPCI)
- AC97-compliant audio

As shown on the side of product's images, RoHS compliant is a CONTEC original marking for RoHS-compliant

BOARD-PC

Model	SLC-8550-LVA	EmCORE-i6415VL	SLC-8150-LVA
CPU*1	Intel® Pentium® M (FSB400MHz) 1.6G to 2.0GHz, Intel® Celeron® M (FSB400MHz) 1.3G to 1.5GHz, 478-pin Ufc-PGA	Intel® Pentium® 4 Processor 2.4GHz to 3.06GHz (FSB 400/533MHz), PGA	Intel® Celeron® (FSB66MHz/100MHz) 566M to 850MHz Intel® Celeron® (FSB100MHz) 1.0G to 1.2GHz Intel® Pentium® III (FSB100MHz/133MHz) 500M to 866MHz Intel® Pentium® III (FSB133MHz) 1.13G to 1.26GHz
Cache	Built in CPU	Built in CPU	
Processor socket	Socket 478	Socket 478	Socket 370
Memory(Optional)	One 184-pin DIMM socket, PC2700 DDR SDRAM for up to 1GB, ECC support	One 184-pin SO-DIMM socket, PC2100/2700 DDR SDRAM for up to 1GB	Two 168-pin DIMM sockets, PC133/100 SDRAM for up to 512MB
Chipset	Intel® 855GME+ICH4	Intel® 845GV + ICH4	Intel® 815E
BIOS	Award BIOS, PnP support	Award BIOS	Award BIOS, PnP support
VGA	Built in Intel® 855GME; One Analog RGB connector (15-pin HD-SUB), One LVDS(18bit) connector (one 20-pin and one 30-pin box-header)	Built in Intel® 845GV, Dual View support; One Analog RGB I/F (One 16-pin mini-box header connector), One LVDS (18/24bit) I/F (One 30-pin header connector), One TV-out (NTSC/PAL) I/F (One 6-pin mini-box header connector)	Built in Intel® 815E; One 16-pin header connector (included HD-SUB connector), PanelLink: 20-pin header connector
Keyboard / Mouse connector	One PS/2 keyboard / Mouse connector (Bundled the 2 in 1 cable)	One PS/2 keyboard / Mouse connector	One box-header 6-pin connector for external keyboard
Serial I/F	Four 9-pin D-SUB connector (RS-232C), One 20-pin box-header connector (RS-232C x2 ports)	Four 16550 UART; COM1/COM3/COM4 is RS-232C, COM2 is RS-232C/422/485; One 40-pin box-header connector	One 40-pin connector : RS-232C x3ch, RS-232C/422/485 x1ch
Parallel I/F	-	One box-header 20-pin connector, SPPI/EPP/ECPP mode correspondence	One box-header 26-pin connector
On-board expansion bus	PCI slot *2	One Mini PCI socket (Type III), One PCI bus	PISA slot, PC/104, Mini PCI slot
LAN Port	100BASE-TX/10BASE-T, Intel® ICH4, One RJ-45 connector, Wake On LAN support	100BASE-TX/10BASE-T Intel® ICH4 One 10-pin box-header connector	100BASE-TX/10BASE-T Intel ICH2 One box-header 10-pin, Wake On LAN support
IDE I/F	Two box-header 40-pin connector: Ultra DMA 33/66/100 *2, Secondary port: shared with CF card slot *4	One box-header 40-pin connector (DMA 100), One box-header 44-pin connector (DMA 33)	EIDE port, One box-header 40-pin connector: Ultra DMA 33/66/100, One 44-pin header connector: Ultra DMA 33
SATA I/F	-		
FDD I/F	-	One box-header 20-pin connector, 2 mode	One box-header 34-pin connector, 2 mode
Compact Flash Slot	One CF card (Type I) slot, Support boot-up from a card *5	-	
SSD Socket	-		DIP socket supports DiskOnChip flash disks (Up to 144MB)
USB Port	6ch USB 2.0 compliant ports, Six USB Type A connectors	4ch USB2.0 compliant ports, Two box-header 10-pin connector	4ch USB 1.1 compliant ports, Two box-header 8-pin connector
RAID	-		
Audio	AC97 CODEC, Line Out: ø3.5 Stereo mini jack, Full-scale output level 1.0Vrms(typ)	AC97 CODEC, One pin-header 10-pin connector (speaker-out, line-in, microphone-in)	AC97 CODEC, One pin-header 10-pin connector (speaker-out, line-in, microphone-in)
Watchdog Timer	255 levels (1 - 255Sec.). Reset occurrence at the time of time up.	255 levels (1 - 255Sec.). Reset occurrence at the time of time up.	15 levels (2 - 30Sec.). Reset or NMI
Hardware Monitor	Monitoring of the temperature of CPU and board,	power supply voltage, and fan speed	
RTC	The backup time of the Lithium Battery is over 10 years at 25°C.	The backup time of the Lithium Battery is over 6 years at 25°C.	The backup time of the Lithium Battery is over 3 years at 25°C.
Power Management	Power management setup via BIOS, Modem Ring On/Wake On LAN, Supports PC98/PC99 ACPI Power management	Power management setup via BIOS	Power management setup via BIOS, Modem Ring On/Wake On LAN, Supports PC98/PC99 ACPI Power management
Bus specification / Size	203mm(L) × 145mm(H) [7.99 inch × 5.92 inch]		203mm (L) × 146mm (H) [7.99 inch × 5.74 inch]
Power consumption (Max.)	+5VDC, 9.0A, +12VDC, 0.25A (for fan), +5VSB (Stand by), 1.0A; PCPM-16F (when Pentium M 1.6GHz is used) 0~60°C *6	[Pentium4 2.8GHz + 512M DDR SDRAM] +3.3VDC 2.6A, +5VDC 1.8A, +12VDC 4.56A, +5VSB (Stand by) 0.25A	[Pentium III FC-PGA2 1.26GHz] +5VDC 10A, +12VDC 0.5A, +5VSB (Stand by) 750mA
Operating temperature/ Humidity	/ 10~90%RH (No condensation)	0 - 60°C (Depends on the specification of CPU and heat sink.), 10 - 90%RH (No condensation)	0~60°C / 10~90%RH (No condensation)
Weight	360g	360g [12.7 oz]	350g [12.3 oz]

*1: Please visit our website for updated information on supported CPUs.

*2: The PCI slot of the SLC-8550-LVA has signal pins that differ from standard PCI slots. Please make sure the PCI board is NOT using the following signals;
A side: A1, A3, A4, A9, A11, A14, A40, A41 B side: B2, B4, B9, B10, B11, B14, B16, B18

*3: Secondary IDE port cannot be set to UltraDMA/66/100 when CF card is used.

*4: The secondary IDE port can only support one drive when a CF card is in use.

*5: CF card slot cannot support hot swap.

*6: This value depends on the specification of CPU and heat sink.

Options for CPU Board

SLC-8550-LVA	
CPU (with FAN)	
PCPM-16F	Pentium M 1.6GHz CPU with Heatsink & fan
PCPMC-13F	Celeron M 1.3GHz CPU with Heatsink & fan
Memory (PC2700 DDR SDRAM)	
PC-MDD256-184A	DDR SDRAM DIMM (PC2700, 256MB)
PC-MDD512-184A	DDR SDRAM DIMM (PC2700, 512MB)
PC-MDD1G-184A	DDR SDRAM DIMM (PC2700, 1GB)

EmCORE-i6415VL	
CPU (with FAN)	
PCP4-24	Pentium 4 2.4GHz (with heat sink and fan)
PCP4-28S	Pentium 4 2.8GHz (with heat sink and fan)
Memory (PC2700 SDRAM Non-Parity)	
Em-MDD256-184	184-pin DDR-Memory (PC2700, 256MB)
Em-MDD512-184	184-pin DDR-Memory (PC2700, 512MB)
Cable kit	
CBK-10-6415-01	Cable kit for EmCORE-i6415VL

SLC-8150-LVA	
CPU	
PC686C-566	Celeron 566MHz
PC686C-850	Celeron 850MHz
PC686-700	Pentium III 700MHz
PC686-850	Pentium III 850MHz
PC686-1260	Pentium III Tualatin 1.26GHz
Memory (PC133 SDRAM, Non-Parity)	
PC-MSD128-168V	SDRAM DIMM 128MB
PC-MSD256-168V	SDRAM DIMM 256MB
PC-MSD512-168V	SDRAM DIMM 512MB

Box-PCs

Panel-PCs

Flat Panel Displays

Silicon Disk Drives

Option

Box PCs & Panel PCs with Windows CE

Single Board Computer

Chassis / Backplane

Analog I/O

Digital I/O

Counter & Motion Controller

Serial Communication

GPIO Communication

Remote I/O

Expansion Unit / Bus Adapter

Software

Accessories & Cables

Distributed Monitor & Control Network: F&EIT

Multi-Programmable Display

Wireless LAN

Remote Monitoring Solution

Service & Products

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CPU Board

BOARD-PC

Box-PCs
Panel-PCs
Flat Panel Displays
Silicon Disk Drives
Option
Box PCs & Panel PCs with Windows CE
Single Board Computer
Chassis / Backplane
Analog I/O
Digital I/O
Counter & Motion Controller
Serial Communication
GPIO Communication
Remote I/O
Expansion Unit / Bus Adapter
Software
Accessories & Cables
Distributed Monitor & Control Network: F&EIT
Multi-Programmable Display
Wireless LAN
Remote Monitoring Solution
Service & Products

3.5inch
Bay Size

Chip Set 815E	Memory Max. 512MB SDRAM
USB 1.1	CF (Option)
	SSD (Option)

3.5-inch Single Board Computer with ULV Celeron 400MHz

EmCORE-i612VLS/C400

CPU ULV Celeron 400MHz	FAN -less	Analog RGB	LAN	Audio
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*Cables are not included. Please purchase the cable kit.
*Manual is not included. Please download from our website.

- Supports Ultra Low Voltage Intel® Celeron® 400MHz (FSB 100MHz)
- Comes in 3.5-inch bay size and is standardly equipped with various I/F including: LAN, VGA/LVDS output, EIDE, 4×USB1.1, 4×COM, Parallel, PS/2 and Audio.
- Intel® 815E + ICH2 chip set
- Supports up to 512MB SDRAM (max)
- Type I / II CF card slot - supports boot-up from CF card.
- Mini PCI expansion connector on board.
- LCD interface enables the direct connection to an LCD monitor.
- Dual View using 2 display units supported.



Model	EmCORE-i612VLS/C400
CPU*1	Ultra Low Voltage Intel® Celeron® Processor 400MHz (FSB 100MHz), EBGA (mounted)
Cache	256KB (L2 cache)
Processor socket	-
Memory(Optional)	One 144-pin SO-DIMM socket, PC100 SDRAM for up to 512MB
Chipset	Intel® 815E + ICH2
BIOS	Award BIOS
VGA	Lynx SM722 (VRAM 8M), Dual View *1 Analog RGB I/F ×1 (15-pin HD-SUB connector ×1), LVDS(18/24bit) I/F ×1 (30 pin-box header connector ×1), LCD(18/24bit) I/F ×1 (40 pin-box header connector ×1), TV-out(NTSC/PAL) ×1 (Composite video terminal ×1)
Keyboard / Mouse connector	One PS/2 Keyboard/Mouse connector
Serial I/F	Four 16550 UART ports COM1, COM3, COM4 are RS-232C COM2 is RS-232C/422/485(jumper selectable) One 9-pin D-SUB connector, One 30 pin-header connector
Parallel I/F	One 26 pin-header connector, support SPPI/EPP/ECP mode
On-board expansion bus	One Mini PCI socket (Type III)
LAN Port	100BASE-TX/10BASE-T, Intel ICH2 integrated controller, One RJ-45 connector
IDE I/F	One EIDE port, up to two IDE devices, support Ultra DMA33
SATA I/F	-
FDD I/F	3.5 inch 2mode I/F, one box-header 34-pin connector
Compact Flash Slot	Type I / II × 1, Support boot up from a card
SSD Socket	-
USB Port	4ch USB 1.1 complaint ports, Two USB A TYPE connector, One 10 pin-header connector
RAID	-
Audio	AC97 CODEC, One pin-header 10-pin connector (speaker-out, line-in, microphone-in)
Watchdog Timer	Software programmable 255 levels (1 - 255sec). Reset occurrence at the time of time up.
Hardware Monitor	Monitoring of the temperature of CPU and board, power supply voltage, and fan speed
RTC	The backup time of the Lithium battery is over 7 years at 25°C. The clock is accurate ×3 minutes/month at 25°C.
Power Management	Power management setup via BIOS
Bus specification / Size	145mm (L) × 102mm (H) [5.71 inch × 4.01 inch]
Power consumption (Max.)	+5VDC 3.8A, +12VDC 0.51A
Operating temperature/ Humidity	0~60°C/ 10~90%RH (No condensation)
Weight	175g [6.17 oz]

Note:
*1: Please visit our website for updated information on supported CPUs.
*2: Analog RGB can be used with LVDS or LCD.

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CPU Board

Options for CPU Board

EmCORE-i612VLS/C400	
Memory (PC-133 SDRAM Non-Parity)	
Em-MSD256-144	144-pin SO-DIMM SDRAM (PC133, 256MB)
Em-MSD512-144	144-pin SO-DIMM SDRAM (PC133, 512MB)
Cable kit	
CBK-08-0612-00	Cable kit for EmCORE-i612VLS/C400

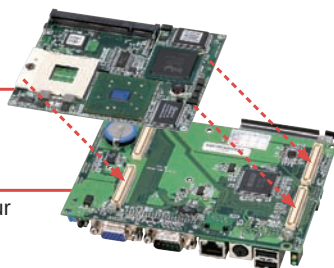
Single Board Computer ETX series

ETX CPU module

Comes Standard

Baseboard

Can flexibly meet your desired spec.



The backbone component comprising CPU and chip set which requires sophisticated development technology is provided as standard "ETX CPU Module". It demonstrates high flexibility by being mounted on a "baseboard" whose connections with power supply and peripherals can be tailored to meet your desired applications.

Optimal Baseboard can be designed within a short time

We can quickly deliver baseboards that are optimized to meet your desired specifications, including standard form factors (ATX, BTX), special shapes, number of expansion slots and connector location.

Future upgrading supported

You can meet the future performance requirements simply by upgrading ETX CPU Module without changing the baseboard.

Evaluation sample baseboard provided

We provide an evaluation baseboard as a standard product. Evaluation on the applications using ETX CPU Module can be made at any time.

Selecting optimum models for cost reduction

You can choose different ETX CPU modules depending on the performance requirements or different baseboards to meet the chassis size and expansion needs. Such variety in products helps you minimize your development cost.

Pentium M -compliant ETX CPU Module EmETX-i702

* CPU optional



- ETX-compliant CPU module which is equipped with various I/F including: LAN, VGA/LVDS output, EIDE, USB2.0x4, COMx2, Parallel, PS/2 and Audio.
- Supports Intel® Pentium® M 1.6G - 2.0GHz (FSB 400MHz) and Celeron® M 1.3G - 1.5GHz (FSB 400MHz).
- Intel® 852GM + ICH4 chipset
- Supports up to 1GB PC2100 DDR SDRAM (200-pin SO-DIMM).

Eden 533MHz ETX CPU Module EmETX-v601/E533



- ETX-compliant CPU module which is equipped with various I/F including: LAN, VGA/LVDS output, EIDE, USB2.0x4, COMx2, Parallel, PS/2 and Audio.
- Equipped with VIA Ultra Low Power Embedded Eden 533MHz (FSB 133MHz)
- VIA VT8606+VT82C686B chipset
- Supports up to 512MB SDRAM

ATX Size Baseboard for ETX Module PBE-1000

* Cables optional



- Can be mounted on ATX motherboard-compliant chassis.
- Comes with CF card slot (Type I/II) which enables booting from CF card.
- Equipped with PCIx4 and ISAx3 expansion slots.

3.5-inch Size Baseboard for ETX Module PBE-1351

* Cables optional



- Compact design of 3.5-inch bay size
- Standardly equipped with PCMCIA socket and LAN port.

Box-PCs

Panel-PCs

Flat Panel Displays

Silicon Disk Drives

Option

Box PCs & Panel PCs with Windows CE

Single Board Computer

Chassis / Backplane

Analog I/O

Digital I/O

Counter & Motion Controller

Serial Communication

GPIO Communication

Remote I/O

Expansion Unit / Bus Adapter

Software

Accessories & Cables

Distributed Monitor & Control Network: F&EIT

Multi-Programmable Display

Wireless LAN

Remote Monitoring Solution

Service & Products

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CPU Board